

California Regional Water Quality Control Board
Santa Ana Region

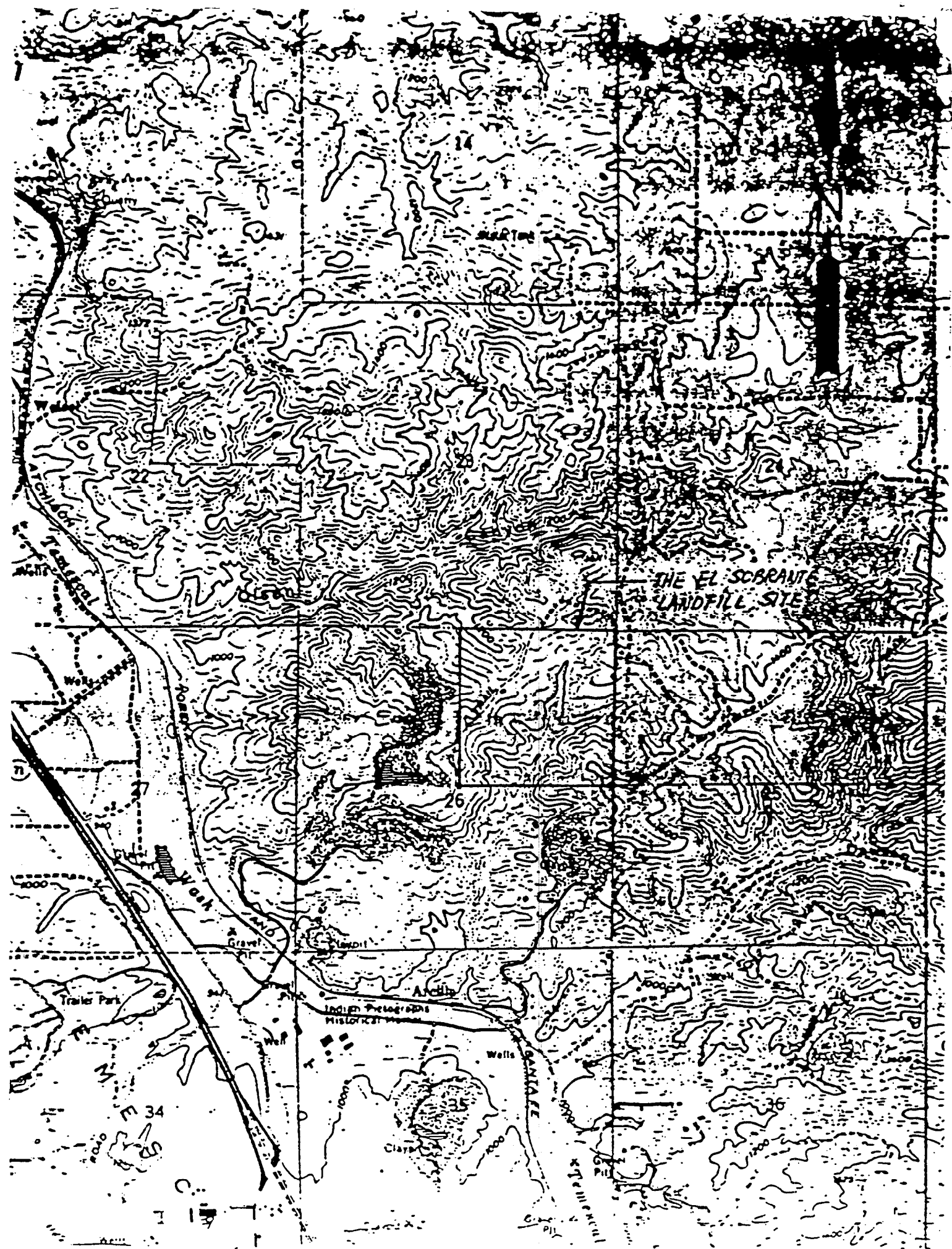
Order No. 85-131

Waste Discharge Requirements
for
Western Waste Industries
El Sobrante Sanitary Landfill
Riverside County

33-AA-0217

The California Regional Water Quality Control Board, Santa Ana Region
(hereinafter Board), finds that:

1. The Riverside County Road Department is currently operating the Corona Sanitary Landfill, which is scheduled to close on April 1, 1986. The Corona site is operated under the requirements contained in Resolution No. 57-29 and Order No. 80-196.
2. The Riverside County Board of Supervisors has conducted feasibility studies and public hearings for the replacement of the Corona Sanitary Landfill. The El Sobrante site was selected as the replacement site and Western Waste Industries was selected to develop, operate and maintain this landfill.
3. On June 24, 1985, Western Waste Industries (hereinafter discharger) submitted a Report of Waste Discharge for the development and operation of the El Sobrante Sanitary Landfill.
4. The discharger and the Riverside County Board of Supervisors have executed at contracts for the operation of the proposed landfill. Should the discharger be unable to properly operate and/or maintain the facility, the County will assume responsibility for compliance with these requirements.
5. The landfill will be built in phases as a single waste management unit which will ultimately occupy 110 acres. The operational life of the landfill is projected to be 25 years.
6. The total fill capacity of this landfill site is 5.8 million tons. The discharger is proposing to receive 600 tons per day of nonhazardous solid wastes at the beginning of the operation. At an increase rate of 2% per year, the discharger will receive 1000 tons per day by the 25th year.
7. The landfill will be located in the NE 1/4 of Section 26, T4S, R6W, SBB&M, as defined in the final Report of Waste Discharge.
8. A Water Quality Control Plan was adopted by the Board on May 13, 1983. The plan contains the water quality objectives and beneficial uses of waters in the Santa Ana Region.
9. Revised regulations governing the discharge of wastes to land contained in Subchapter 15 of Title 23, Chapter 3, of the California Administrative Code, (hereinafter, Subchapter 15) became effective on November 27, 1984.



10. These requirements are necessary to implement the Water Quality Control Plan and the provisions of Subchapter 15.
11. The surface drainage of the site is tributary to Temescal Creek, the intermittent beneficial uses of which include:
 - a) Agricultural supply,
 - b) Industrial service supply,
 - c) Ground water recharge,
 - d) Non-contact water recreation,
 - e) Warm freshwater habitat, and
 - f) Wildlife habitat.
12. This site overlies an area tributary to the Bedford Ground Water Subbasin, the beneficial uses of which include:
 - a) Municipal and domestic supply,
 - b) Agricultural supply,
 - c) Industrial service supply, and
 - d) Industrial process supply.
13. The water quality objectives for Temescal Creek and the Bedford Groundwater Subbasin are discussed in Chapter 3 of the Water Quality Control Plan.
14. The landfill site is in a canyon and is not located on a known Holocene fault. The site geology shows bedrock (Bedford Canyon Formation) at the bottom, overlain by a weathered zone, the Silverado Formation, and recent alluvium (terrace deposits). The Bedford Canyon Formation is considered to be a non-water-bearing unit, and water present within it is probably perched, derived from winter precipitation which is held within the bedrock fracture system.
15. The geologic setting and site characteristics will ensure no impairment of beneficial uses of surface water or groundwater beneath or adjacent to the landfill from vertical migration of waste materials. However, due to the permeability and transmissivity of the soils overlying the bedrock, geologic conditions will not ensure the protection of ground or surface water due to lateral migration. Therefore, in accordance with Section 2533(b)(2) of Subchapter 15, the landfill is required to have a single clay liner with permeability of 1×10^{-6} cm/sec or less.
16. In accordance with Section 2510(c)(1) of Subchapter 15, the discharger has demonstrated that it is not feasible to place a clay liner under the entire landfill because it is unreasonably and unnecessarily burdensome and will cost substantially more than alternatives which meet the criteria of Section 2510(b).
17. The discharger has proposed the following alternatives to the requirement of a clay liner under the entire site:
 - o A clay liner along the western edge of the landfill to prevent any off-site migration of leachate downgradient through the terrace deposits; leachate collection systems; cutoff walls tied into bedrock at the toes of the landfill; a subsurface drain system to collect water from existing

seasonal springs and seeps and convey it to a monitoring point at the downstream toe of the landfill; and monitoring wells placed around the landfill to detect migration of contaminants from the fill area.

18. The alternatives listed in Finding 17 are consistent with the performance goal of the prescriptive standard of Section 2533(b)(2) and affords equivalent protection against water quality impairment. These alternatives are approved in accordance with Section 2510(b), Subchapter 15.
19. The design of the proposed waste management unit meets the criteria for classification as a Class III landfill.
20. Approximately 2.7 million gallons per year of wastewater will be disposed of in evaporation-percolation ponds adjacent to the landfill. This wastewater consists only of nonhazardous domestic sewage (septic tank pumpings) and wastewater from chemical toilets and other sources approved by the Executive Officer which can be discharged to land for percolation in accordance with applicable provisions of the Water Quality Control Plan pursuant to these requirements.
21. Riverside County has prepared and adopted a Final Environmental Impact Report for this project, in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.). The Regional Board finds that the project should not have significant environmental impacts on water quality if conducted within the requirements and provision of this order.
22. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
23. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger shall comply with the following:

A. Discharge Requirements - General

1. The treatment or disposal of waste shall not cause a pollution or nuisance as defined in Section 13050 of the California Water Code.
2. The discharge of hazardous or designated waste is prohibited.
3. The discharger shall comply with Monitoring Program 85-131.
4. The discharger shall maintain a copy of this order at the site so as to be available at all times to site operating personnel.

B. Discharge Requirements - Landfill

1. The discharger shall install the following measures in accordance with the applicable sections of Subchapter 15:
 - o A clay liner along the western edge of the landfill to prevent any off-site migration of leachate downgradient through the terrace deposits.
 - o Cutoff walls installed at the toes of the landfill,
 - o Leachate collection and removal systems,
 - o Interim cover, and
 - o Precipitation and drainage controls.
2. The disposal of wastes shall be limited to the areas designated on the plan submitted as part of Report of Waste Discharge on June 24, 1985. Any revision or modification of this plan shall be reviewed and approved by the Executive Officer of the Board before the disposal operation is allowed.
3. The discharger shall establish and maintain permanent bench marks in California coordinates (or equivalent) to define the boundary of the approved landfill area. Those bench marks shall be certified by a licensed surveyor or a Civil Engineer authorized to practice in California.
4. The water used during the landfill operations shall be limited to a minimal amount reasonably necessary for dust control purposes, fire suppression, and minor maintenance.
5. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources shall not contact or percolate through wastes discharged at the site.
6. Diversion and drainage facilities shall be designed and constructed to accommodate the anticipated volume of precipitation and peak flows from surface runoff from up to and including a 100 year-24 hour storm.
7. Adequate cover shall be placed over all lifts except the active face at all times. The covered lifts shall be graded to prevent ponding and percolation of surface water into the waste material and to prevent erosion from storms of up to and including a 100 year-24 hour event.
8. ^{To be revised} ~~The disposal of liquid wastes (surface drainage and leachate) from or into shall be the landfill shall be approved by the Executive Officer of the Board.~~
9. Containment structures shall be protected and maintained to ensure their effectiveness.
10. During the winter months when precipitation can be expected, the disposal activity shall be confined to the smallest area possible based upon anticipated quantity of wastes and operational procedures.

11. The discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.
12. The discharger shall notify the Board immediately of any slope failure occurring in a waste management unit. Any failure which threatens the integrity of containment features or the waste management unit shall be promptly corrected after approval of the method and schedule by the Board.
13. The discharger shall notify the Board within seven days if fluid is detected in a previously dry leachate collection and removal system or if a progressive increase is detected in the volume of fluid in a leachate collection and removal system.

C. Discharge Requirements - Evaporation-Percolation Ponds

1. Only sanitary septic tank wastes, approved chemical toilet wastes or other ~~approved by~~ liquid wastes approved by the Executive Officer of the Board shall be discharged to the evaporation-percolation ponds.
2. These wastes shall be maintained in the evaporation-percolation ponds at all times. In the event that percolated wastes surface in an adjacent area, the discharger shall implement an abatement program which will preclude any future surfacing of waste. Such a program must be provided to the Board as soon as possible after a failure is noted.
3. The discharge of wastes to any evaporation-percolation pond which has less than 12 inches of freeboard is prohibited.

D. Provisions

1. Disposal of wastes shall not commence until it is determined that the measures necessary to meet waste discharge requirements have been taken. A complete Design Report containing all the information required by Subsection 2596(a) of Subchapter 15 shall be approved by the Executive Officer before the commencement of the landfill operation.
2. Prior to discharging any waste the discharger shall file with this Board an operation plan which shall be updated when substantial changes in operations have been made. A report indicating conformance with the operation plans will be submitted annually. The operation plan shall include the information required by Subsection 2596(b) of Subchapter 15.
3. The operation plan shall also include the following:
 - a. Description of the waste materials anticipated to be received.
 - b. A map showing the boundaries of the disposal site and waste disposal areas.
 - c. General description of disposal site operations.
 - d. Detailed hydrological and geological data for the disposal area.
 - e. Measures proposed for control of drainage, leachate and gases.
 - f. Ground water monitoring or other monitoring program.
 - g. Anticipated land use after termination of disposal operations.

4. Prior to discharging any wastes, the discharger shall implement a water quality monitoring program in accordance with Article 5 of Subchapter 15. Final plans of this program shall be approved by the Executive Officer prior to implementation.
5. The discharger shall submit the closure and post-closure maintenance plan containing all information in accordance with Section 2597 of Subchapter 15, to the Board at least 180 days prior to beginning any partial or final closure activities.
6. Prior to discharging any wastes, the discharger shall provide a report and a fund sufficient to ensure the closure and subsequent maintenance of the disposal site in a manner that will not pose an adverse threat to the environment.
7. The Riverside County Road Department shall file a written report within 90 days after the total quantity of wastes discharged at this site equals 75 percent of the reported capacity of the site. The report shall contain a schedule for studies, design and other steps needed to provide additional capacity, or the total quantity discharged shall be limited to the reported capacity.
8. The discharger shall notify the Board in writing of any proposed change in ownership or responsibility for construction, operation, closure, or post-closure maintenance of the landfill. This notification shall be given prior to the effective date of the change and shall include a statement by the new discharger that construction, operation, closure, and post-closure maintenance will be in compliance with any existing waste discharge requirements and any revisions thereof.

I, James W. Anderson, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of any order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on September 13, 1985.

JAMES W. ANDERSON
Executive Officer

California Regional Water Quality Control Board
Santa Ana Region

Monitoring and Reporting Program No. 85-131
for
Western Waste Industries
El Sobrante Sanitary Landfill, Riverside County

General Monitoring

1. A permanent daily log of the types of all materials, and the amounts of each type discharged at the landfill site shall be maintained.
2. A separate daily log of the disposal of septic tank and chemical toilet wastes shall be maintained for the evaporation-percolation ponds. The log shall include the type and amount of wastes disposed of and the freeboard of the ponds.
3. Diversion and drainage facilities shall be inspected each week and comments regarding the adequacy of the facilities shall be recorded in a permanent log.
4. The landfill operation plan shall be prepared and submitted in accordance with Provisions C.3. and C.4.

Ground Water Monitoring

The discharger shall conduct the following programs in accordance with the Articles 5 and Subsection 2595(g)(7) of Subchapter 15.

1. By July 1, 1986, the discharger shall complete one year's quarterly sampling data from all background monitoring wells. The Executive Officer will establish water quality protection standards for indicator parameters from these background data.
2. The discharger shall institute a detection monitoring program. Details of the program shall be submitted to the Board by February 15, 1987 for approval.
3. In April and October of each year, if waste constituents are detected at the downgradient monitoring wells in excess of water quality protection standards, the discharger shall institute a verification monitoring program.
4. In May and November of each year, if verification monitoring establishes that any water quality protection standard has been exceeded at downgradient monitoring wells, the discharger shall institute a correction action program.
5. In April of each year, the downgradient monitoring wells shall be sampled, combined, and analyzed for the constituents on EPA's Priority Pollutants List (copy attached).

Reporting

1. Quarterly reports shall be submitted to the Board in accordance with the following schedule:

Reporting Period

January - February - March
April - May - June
July - August - September
October - November - December

Report Due

April 15
July 15
October 15
January 15

2. Quarterly reports shall include the following:
 - a. A copy of landfill log,
 - b. A copy of evaporation-percolation ponds log, and
 - c. A copy of diversion and drainage facilities inspection log.
3. Annual operation plans, the conformance reports and an updated geologic map shall be submitted by January 1 of each year.
4. Semiannual ground water monitoring report shall be submitted after January 1, 1987, in accordance with the following schedule:

Monitoring Period

January to June
July to December

Report Due

July 15
January 15

- a. January report shall include the Priority Pollutant Analysis Data.
5. All reports shall be signed by an authorized representative of the discharger and shall be submitted under penalty of perjury.

Ordered by _____

JAMES W. ANDERSON
Executive Officer

September 13, 1985

Metals

Antimony
Arsenic
Beryllium
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Selenium
Silver
Thallium
Zinc

Miscellaneous

Cyanide
Asbestos*

*Not required unless
specifically requested.

Pesticides

Method 625
Aldrin
Chlordane
Dieldrin
4, 4' - DDT
4, 4' - DDE
4, 4' - DDD
Alpha Endosulfan
Beta Endosulfan
Endosulfan Sulfate
Endrin
Endrin Aldehyde
Heptachlor
Heptachlor Epoxide
Alpha BHC
Beta BHC
Gamma BHC
Delta BHC
Toxaphene
PCB 1016
PCB 1221
PCB 1232
PCB 1242
PCB 1248
PCB 1254
PCB 1260

Base/Neutral Extractibles

Method 625
Acenaphthene
Benzidine
1, 2, 4 - Trichlorobenzene
Hexachlorobenzene
Hexachloroethane
Bis (2-Chloroethyl) Ether
2 - Chloronaphthalene
1, 2 - Dichlorobenzene
1, 3 - Dichlorobenzene
1, 4 - Dichlorobenzene
3, 3' - Dichlorobenzidine
2, 4 - Dinitrotoluene
2, 6 - Dinitrotoluene
1, 2 - Diphenylhydrazine
Fluoranthene
4 - Chlorophenyl Phenyl Ether
4 - Bromophenyl Phenyl Ether
Bis (2 - Chloroisopropyl) Ether
Bis (2 - Chloroethoxy) Methane
Hexachlorobutadiene
Hexachlorocyclopentadiene
Isophorone
Naphthalene
Nitrobenzene
N - Nitrosodimethylamine
N - Nitrosodi - N - Propylamine
N - Nitrosodiphenylamine
Bis (2 - Ethylhexyl) Phthalate
Butyl Benzyl Phthalate
Di - N - Butyl Phthalate
Di - N - Octyl Phthalate
Diethyl Phthalate
Dimethyl Phthalate
Benzo (A) Anthracene
Benzo (A) Pyrene
Benzo (B) Fluoranthene
Benzo (K) Fluoranthene
Chrysene
Acenaphthylene
Anthracene
1, 12 - Benzoperylene
Fluorene
Phenanthrene
1, 2, 5, 6 - Dibenanthracene
Indeno (1, 2, 3 - CD) Pyrene
Pyrene
TCDD

Acid Extractibles

Method 625
2, 4, 6 - Trichlorophenol
P - Chloro - M - Cresol
2 - Chlorophenol
2, 4 - Dichlorophenol
2, 4 - Dimethylphenol
2 - Nitrophenol
4 - Nitrophenol
2, 4 - Dinitrophenol
4, 6 - Dinitro - O - Cresol
Pentachlorophenol
Phenol

Volatile Organics

Method 624
Acrolein
Acrylonitrile
Benzene
Carbon Tetrachloride
Chlorobenzene
1, 2 - Dichloroethane
1, 1, 1 - Trichloroethane
1, 1 - Dichloroethane
1, 1, 2 - Trichloroethane
1, 1, 2, 2 - Tetrachloroethane
Chloroethane
Chloroform
1, 1 - Dichloroethylene
1, 2 - Trans Dichloroethylene
1, 2 - Dichloropropane
1, 2 - Dichloropropylene
Ethylbenzene
Methylene Chloride
Methyl Chloride
Methyl Bromide
Bromofom
Bromodichloromethane
Trichlorofluoromethane
Dichlorodifluoromethane
Dibromochloromethane
Tetrachloroethylene
Toluene
Trichloroethylene
Vinyl Chloride
Bis (chloromethyl) Ether
2 - Chloroethyl Vinyl Ether